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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
|-----------------|-------------|----------------------|---------------------|

09/435,461 11/05/99 DYSON

W GC593

HM12/1010

CHRISTOPHER L STONE
GENENCOR INTERNATIONAL INC
925 PAGE MILL ROAD
PALO ALTO CA 94304-1013

EXAMINER

MELLER, M

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1651

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|---------------------|
| | 09/435,461 | DYSON ET AL. |
| Examiner | Art Unit | |
| Michael V. Meller | 1651 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 31 July 2001.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1,4-7,10-13,17,18 and 21-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1,4-7,10-13,17,18 and 21-23 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 11 .
4) Interview Summary (PTO-413) Paper No(s). ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Any objection or rejection of record which is not expressly repeated in this action has been overcome by Applicant's response and withdrawn.

Continued Prosecution Application

The request filed on 7/31/2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/435,461 is acceptable and a CPA has been established. An action on the CPA follows.

Election/Restrictions

The election of species requirement of record is maintained for the reasons of record.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

Wade Dyson's post office address has been altered without any initials indicating that he made the change.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-7, 11, 12, 17 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 fails to find proper antecedant basis from claim 2 since claim 2 has been cancelled.

Claims 5-7, 11, 12 and 23 are rejected since the phrases, "has at least 10% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase enzyme", "has at least 50% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase enzyme", and "has at least

100% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase enzyme" are vague and indefinite since the polyesterase will always have 10%, 50% or 100% greater hydrolysis in a UV assay compared to an assay without a polyesterase. Claim 11 is also redundant in its use of *Pseudomonas* twice.

Claim 17 provides for the use of polyesterase to improve the textile characteristics of a polyester, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 17 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5-7, 10-13, 17, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/27237 ('237-see abstract, pages 1-5, the examples, and the claims) or WO 99/01604 ('604-see abstract, pages 1-3, page 20, line 25-page 23, line 20, and the claims).

The references teach that aromatic polyester fabrics such as poly(ethylene terephthalate) are treated with polyesterases such as lipases, esterases, etc. which will modify the surface of the polyester. The polyesterases are derived from sources such as *Pseudomonas*. The polyesterase of the method has at least 10%, 50% and 100% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase since the polyesterase will always have 100% greater hydrolysis in a UV assay compared to an assay without a polyesterase.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 97/27237 ('237-see abstract, pages 1-5, the examples, and the claims) or WO 99/01604 ('604-see abstract, pages 1-3, page 20, line 25-page 23, line 20, and the claims).

The WO references teach that aromatic polyester fabrics such as poly(ethylene terephthalate) are treated with polyesterases such as lipases, esterases, etc. which will modify the surface of the polyester. The polyesterases are derived from sources such as *Pseudomonas*. The polyesterase of the method has at least 10%, 50% and 100% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase since the polyesterase will always have 100% greater hydrolysis in a UV assay compared to an assay without a polyesterase.

The WO references do not specifically mention if the fabrics have stains on them or not, thus, the fabrics of the WO references do not have stains on them or in the very least it would have been obvious for one of ordinary skill in the art to use a fabric without a stain since the method is directed to treating the polyester for prilling, prilling prevention, weight, etc. of the polyester. The method is not concerned with whether

there is a stain or not on the fabric, thus, the claimed method is anticipated or in the very least obvious over the cited references.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/27237 ('237-see abstract, pages 1-5, the examples, and the claims) or WO 99/01604 ('604-see abstract, pages 1-3, page 20, line 25-page 23, line 20, and the claims) taken with GB 2,307,695 (GB- abstract, page 2, line 10-page 3, line 10, page 7, line 21-page 8, line 20, and the claims).

The WO references teach that aromatic polyester fabrics such as poly(ethylene terephthalate) are treated with polyesterases such as lipases, esterases, etc. which will modify the surface of the polyester. The polyesterases are derived from sources such as *Pseudomonas*. The polyesterase of the method has at least 10%, 50% and 100% greater hydrolysis in a UV and/or MB assay than a similar method without the use of a polyesterase since the polyesterase will always have 100% greater hydrolysis in a UV assay compared to an assay without a polyesterase.

The WO references do not teach that the treatment occurs in the presence of glycerol.

GB teaches that a detergent composition which contains glycerol and enzymes such as lipases, amylases, etc. (polyesterases) among other ingredients are used to wash fabrics such as polyesters.

Thus, it would have been obvious to one of ordinary skill in the art to use glycerol in the method of either of the WO references for modifying the surface of an aromatic

polyester since GB teaches that glycerol is well known to be used in a composition which contains polyesterases to wash fabrics such as polyesters which would modify the surface of the polyester.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 703-308-4230. The examiner can normally be reached on Monday thru Friday: 10:30am-7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 703-308-4743. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-0294 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



MVM

Michael Meller

Patent Examiner

October 9, 2001

Art Unit 1651